

**VIRTUAL MACHINE INTERFACE FOR HARDWARE RECONFIGURABLE
AND SOFTWARE PROGRAMMABLE PROCESSORS**

ABSTRACT

The present invention provides a virtual machine interface (VMI) and an application programming interface (API) usable in conjunction with a reconfigurable wireless network communication apparatus. The reconfigurable wireless network communication apparatus comprises a plurality of hardware kernels. The apparatus can be reconfigured to support different or modified communication protocols over time. The VMI comprises a library of software objects. By configuring VMI software objects, a programmer selects the communication protocol used by the reconfigurable wireless network communication apparatus. The API of the present invention provides higher level management of the communication protocol used by a reconfigurable wireless network communication apparatus. The API comprises a library of high level software objects that further abstract hardware details of the apparatus.

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